

B1
Concluded

74. A launcher platform comprising:

a support structure structured and arranged to be elevated and rotated and including a top plate, the support structure mounted on an HMMWV vehicle; and a plurality of rails mounted on the support structure for supporting missiles thereon, selected rails offset rearwardly from the other rails to accommodate additional missiles and different type missiles while maintaining a low center of gravity.

A separate copy of new claims 40-74 is also attached hereto.

REMARKS

The applicants appreciate the Examiner's thorough examination of the application and request reexamination and reconsideration of the application in view of the preceding amendments and the following remarks. The amendments contain no new matter and raise no new issues.

The applicants also appreciate that the Examiner allowed a telephone conference on June 3, 2003 regarding suggested amendments to the claims, as well as the Examiner's preliminary indication that independent claims 40, 52, 55 and 68-74 appear to be allowable.

In the March 6, 2003 Final Office Action, and prior to the aforementioned telephone conference, the Examiner had objected to claims 32-35 as substantially duplicative of claims 1, 2, 4, 5, 10, 11, 21 and 22. The Examiner had rejected claims 1-9, 12, 15-20, 23, and 26-31 under 35 U.S.C. §102(b) as being anticipated by the Defense Systems Daily ("DSD") reference. The Examiner also had rejected claims 13, 14, 24, and 25 under 35 U.S.C. §103(a)

as being unpatentable over the DSD and DPA articles referenced, stating that the selection of aluminum or a composite as the material of choice is well within the knowledge of one with ordinary skill in the art and amounts to an obvious engineering decision.

In view of the June 3, 2003 telephone conference with the Examiner, the cancellation of claims 1-39, and the submission of new claims 40-74, the objections and rejections contained in the Final Office Action are moot.

New independent claims 55, 68, 71, and 72 each contain the allowable elements of the previously objected to claims, namely that the support structure is a monolithic platform support structure that includes a set of mounting pads for each rail. Claims 56-67 depend from claim 55. Accordingly, it is submitted that claims 55-68, 71 and 72 are in condition for allowance.

New independent claims 40, 52, 69 and 70 include that the support structure is structured and arranged to be elevated and rotated and includes a top plate, as noted in the specification at, e.g., page 11, lines 3-5, Fig. 14, page 12, lines 23-25, and Fig. 12.

Additionally, claim 40 recites a plurality of rails mounted on the support structure, including selected rails elevated above the other rails, each selected rail offset rearwardly from the other rails. Claim 52 recites a plurality of rails on each side of the support structure, which is structured and arranged to be elevated and rotated and includes a top plate, and at least one rail on each side elevated above the other rails and offset rearwardly from the other rails. Claim 69 includes the support structure including a top plate and a plurality of rails disposed on the support structure to support missiles thereon having at least one rail elevated above the other rails. Claim 70 also includes the support structure including a top plate and a plurality of rails disposed on the support structure to support missiles thereon having at least

one rail offset rearwardly from the other rails. The foregoing combination of elements are neither disclosed nor obvious over the cited references. Claims 41-51 depend from independent claim 40, and claims 53 and 54 depend from independent claim 52.

Accordingly, claims 40-54 are also in condition for allowance.

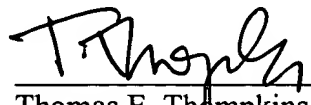
New claims 73 and 74 include the support structure including a top plate mounted on a HMMWV vehicle. Claim 73 includes a plurality of rails with selected rails elevated above the other rails, and claim 74 includes a plurality of rails with selected rails offset rearwardly from the other rails, also in contrast to the cited references. Accordingly, new independent claims 73 and 74 are in condition for allowance.

CONCLUSION

Each of the Examiner's rejections has been addressed or traversed. Accordingly, it is respectfully submitted that new claims 40-74 are in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned or his associates, collect in Waltham, Massachusetts at (781) 890-5678.

Respectfully submitted,


Thomas E. Thompson, Jr.
Reg. No. 47,136

1 40. A launcher platform comprising:
2 a support structure structured and arranged to be elevated and rotated and
3 including a top plate; and
4 a plurality of rails mounted on the support structure for supporting missiles
5 thereon, including selected rails elevated above the other rails to accommodate additional
6 missiles and different type missiles while maintaining a low center of gravity, each selected
7 rail offset rearwardly from the other rails.

1 41. The launcher platform of claim 40 in which there are six rails total, three on
2 each side of the support structure, and the intermediate rails on each side are elevated above
3 the other rails.

1 42. The launcher platform of claim 40 in which there are N total rails where N is
2 an even number, $N/2$ rails on each side of the support structure, and the minority of the rails
3 are elevated.

1 43. The launcher platform of claim 40 in which there are six rails total, three on
2 each side of the support structure, and the intermediate rails on each side are elevated above
3 and offset rearwardly from the other rails.

1 44. The launcher platform of claim 40 in which there are N rails total where N is
2 an even number, $N/2$ rails on each side of the support structure, and the minority of the rails
3 are offset from the other rails.

1 45. The launcher platform of claim 40 in which the support structure is a
2 monolithic platform.

1 46. The launcher platform of claim 45 in which the monolithic platform includes
2 a set of mounting pads for each rail.

1 47. The launcher platform of claim 46 in which the mounting pads are cast as a
2 part of the platform.

1 48. The launcher platform of claim 45 in which the platform has a predetermined
2 width and a predefined length.

1 49. The launcher platform of claim 45 in which the platform is made of
2 aluminum.

1 50. The launcher platform of claim 45 in which the platform is made of a
2 composite material.

1 51. The launcher platform of claim 45 in which the platform has a center line
2 and the rails are symmetrically arranged with respect to the center line of the platform.

1 52. A launcher platform comprising:
2 a support structure structured and arranged to be elevated and rotated and
3 including a top plate; and
4 a plurality of rails on each side of the support structure, at least one rail on
5 each side elevated above the other rails and offset rearwardly from the other rails to
6 accommodate additional missiles and different type missiles.

1 53. The launcher platform of claim 52 in which there are N rails total where N is
2 an even number, $N/2$ rails on each side of the support structure, and the minority of the rails
3 on each side are elevated.

1 54. The launcher platform of claim 52 in which at least one rail is offset from
2 the other rail or rails.

55. A launcher platform comprising:
a monolithic platform support structure; and
a plurality of rails mounted on the monolithic platform support structure for supporting missiles thereon, the monolithic platform support structure including a set of mounting pads for each rail, selected rails elevated above the other rails to accommodate additional missiles and different type missiles while maintaining a low center of gravity.

56. The launcher platform of claim 55 in which the mounting pads are cast as a part of the platform.

57. The launcher platform of claim 55 in which there are six rails total, three on each side of the monolithic platform support structure, and the intermediate rails on each side are elevated above the other rails.

58. The launcher platform of claim 55 in which there are N total rails where N is an even number, $N/2$ rails on each side of the support structure, and the minority of the rails are elevated.

59. The launcher platform of claim 55 in which adjacent rails are offset from the other rails.

60. The launcher platform of claim 59 in which the offset rails are offset rearwardly from the other rails.

61. The launcher platform of claim 59 in which the elevated rails are offset from

the other rails.

62. The launcher platform of claim 59 in which there are six rails total, three on each side of the monolithic platform support structure, and the intermediate rails on each side are elevated above and offset rearwardly from the other rails.

63. The launcher platform of claim 59 in which there are N rails total where N is an even number, $N/2$ rails on each side of the monolithic platform support structure, and the minority of the rails are offset from the other rails.

64. The launcher platform of claim 55 in which the monolithic platform support structure has a predetermined width and a predefined length.

65. The launcher platform of claim 55 in which the monolithic platform support structure is made of aluminum.

66. The launcher platform of claim 55 in which the monolithic platform support structure is made of a composite material.

67. The launcher platform of claim 55 in which the monolithic platform support structure has a center line and the rails are symmetrically arranged with respect to the center line of the platform.

68. A launcher platform comprising:

- a monolithic platform support structure; and
- a plurality of rails mounted on the support structure for supporting missiles thereon, the monolithic platform support structure including a set of mounting pads for each rail with selected rails elevated above and offset rearwardly from the other rails to accommodate additional missiles and different type missiles while maintaining a low center of gravity.

69. A launcher platform comprising:

a platform support structure structured and arranged to be elevated and rotated and including a top plate; and

a plurality of rails disposed on the support structure to support missiles thereon having at least one rail elevated above the other rails.

70. A launcher platform comprising:

a support structure structured and arranged to be elevated and rotated and including a top plate; and

a plurality of rails disposed on the support structure to support missiles thereon having at least one rail offset rearwardly from the other rails.

71. A launcher platform comprising:
a monolithic platform support structure; and
a plurality of rails disposed on the support structure to support missiles thereon having at least one rail elevated above the other rails, the monolithic platform support structure including a set of mounting pads for each rail.

1 72. A launcher platform comprising:
2 a monolithic platform support structure; and
3 a plurality of rails disposed on the support structure to support missiles
4 thereon having at least one rail offset rearwardly from the other rails, the monolithic
5 platform support structure including a set of mounting pads for each rail.

1 73. A launcher platform comprising:
2 a support structure structured and arranged to be elevated and rotated and
3 including a top plate, the support structure mounted on an HMMWV vehicle; and
4 a plurality of rails mounted on the support structure for supporting missiles
5 thereon, selected rails elevated above the other rails to accommodate additional missiles
6 and different type missiles while maintaining a low center of gravity.

1 74. A launcher platform comprising:
2 a support structure structured and arranged to be elevated and rotated and
3 including a top plate, the support structure mounted on an HMMWV vehicle; and
4 a plurality of rails mounted on the support structure for supporting missiles thereon,
5 selected rails offset rearwardly from the other rails to accommodate additional missiles and
6 different type missiles while maintaining a low center of gravity.